IN THE CASE OF

DAVID FERGUSON

VALUATION OF LOST EARNINGS
[PRELIMINARY]

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DAVID FERGUSON

David Ferguson was born on September 27, 1949. According to the *Statistical Abstract of the United States* (2000), a white male born in 1949 has a normal life expectancy of 77.9 years. An individual of his age and educational experience has a normal work-life expectancy to the age of 60.2 years[1]. Mr. Ferguson is married with no minor children living at home.

BACKGROUND

On September 7, 2000, Mr. Ferguson was involved in a work-related accident when a safety cable broke, causing him to fall twelve feet to the ground and injure his back. Following his injury, he returned intermittently to light-duty work. He performed light-duty work from January 1, 2001 to March 23, 2001, from May 11, 2001 to June 1, 2001, from September 21, 2001 to January 1, 2002, and again from May 6, 2002 through May 13, 2002. Mr. Ferguson is not currently employed.

In February 2003, Mr. Ferguson was evaluated by vocational expert Rod W. Durgin, Ph.D. Mr. Durgin is of the opinion that because of the physical restrictions resulting from his injury and lack of access to the jobs in his local labor market, Mr.

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[1]Ciecka, J., S. Epstein, and J. Goldman, "A Markov Process Model of Work-Life Expectancies by Educational Attainment on Labor Market Activity in 1987-1988" *Journal of Legal Economics*. (Winter 2000-01).

Ferguson is "competitively unemployable[2]."

LOST EARNINGS

The intermittent work that Mr. Ferguson was able to perform following his injury resulted in a loss of earnings because the amount of money he was able to make post-injury was less than he would have earned had he not been injured. Because he is competitively unemployable, these losses will likely continue into the future. The purpose of this preliminary report is to place a value on earnings lost by Mr. Ferguson as a result of his injury. Estimates of the earnings lost by Mr. Ferguson are provided in Tables 1 and 2. The earnings loss can be divided into two parts: losses to the present and future losses. The value of the earnings lost to present appears in Table 1, while the estimates of the future losses to the retirement ages of 60.2 and 65 appear in Table 2. In these tables, total earnings (column 5) are defined as wages (column 3) plus company-paid fringe benefits (column 4). The company-paid fringe benefits in a given year are taken to be 37.3 percent of wages earned that year[3].

Loss to Present

The upper portion of Table 1 presents the values of the wages and fringe benefits Mr. Ferguson would have earned, had he not been injured, from September 7, 2000 to September 2, 2003, hereafter defined as the present. As indicated on his

[2]Report of a vocational assessment of Mr. Ferguson dated February 26, 2003, prepared by Rod W. Durgin, Ph.D.

[3] This value is the average for firms in the transportation, distribution and warehousing industry class from *The 2001 Employee Benefits Study* from the U.S. Chamber of Commerce, excluding payments for time not worked. This rate is used to approximate the benefits received by Mr. Ferguson and is subject to change should the actual benefit information become available.

federal tax return, Mr. Ferguson earned wages of $36,368 in 1999. The wage figures in Panel A in Table 1 are based on the assumption that had he not been injured, Mr. Ferguson would have received cost of living raises in 2000 through 2003. As indicated in Panel A, if he had not been injured, Mr. Ferguson would have earned wages and fringe benefits totaling $165,765 for that time period. However, following his injury, Mr. Ferguson had been able to return to work for short periods of time. The lower portion of Table 1 provides the value of the earnings realized by Mr. Ferguson from the date of his injury to present. The wage figures in column 3 are from Mr. Ferguson's tax returns for those years and represent the amounts actually earned from the date of his injury to the present. His total earnings over the period, including fringe benefits, were $5,790.

Mr. Ferguson's loss to present is equal to the difference between the earnings he would have earned had he not been injured and the earnings he actually realized. The present value of the earnings lost due to injury to present is $159,976 ($165,765 less $5,790)

<u>Future Losses</u>

The future earnings losses to the retirement ages of 60.2 and 65 are presented in Table 2. It is assumed that had he not been injured, Mr. Ferguson's earnings would have increased in future years at the same average annual rate as the annual changes in the Consumer Price Index (CPI). The future earnings figures appearing in Table 2 are therefore expressed in real (constant) year 2003 dollars. These future earnings projections are discounted through the use of a real discount rate in order to express

their present value. The real discount rate is based on the difference between the average interest rate on a mixture of financial instruments that provide liquidity and security and the expected rate of inflation. The long-run historical relationship between the average interest rates in a mixture of federal government securities and the annual changes in the CPI results in a real discount rate of 2.06 percent[4].

Because it is not likely that he will return to the labor force, there is no wage offset and the future losses suffered by Mr. Ferguson are equal to the future wages he would have earned had he not been injured. The total earnings of Mr. Ferguson from September 3, 2003 until a retirement at age 60.2 in 2009 are estimated to be $351,827. These earnings have a present value of $326,846. His total future lost earnings until the retirement age of 65 are estimated to be $621,168, having a present value of $553,868.

[4] The average return on a portfolio of three-month, six-month, three-year, and ten-year U.S. Treasury securities over the period 1960-2001 is 6.56 percent. The average rate of inflation over this period is 4.41 percent. This implies a long-run real rate of return of 2.06 percent.

CONCLUSION

Due to a work-related injury on September 7, 2000, David Ferguson has experienced a loss of income. Vocational expert Rod W. Durgin, Ph.D., has indicated that Mr. Ferguson in competitively unemployable and is not likely to return to the workforce. The total earnings loss experienced by Mr. Ferguson to a retirement age of 60.2 has a present value of $486,822. The total earnings loss to age 65 has a present value of $713,844. These losses are summarized in the table below.

Summary Table
Present Value of Lost Earnings to Ages 60.2 and 65

Loss	Retirement Age 60.2	65
Present value of loss to present	$159,976	$159,976
Present value of future losses	326,846	553,868
Present value of total lost earnings	$486,822	$713,844

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TABLE 1. VALUE OF LOST EARNINGS TO PRESENT

Year (1)	Age (2)	Wages (3)	Fringe Benefits (4)	Total Earnings (5)=(3)+(4)	Present Value (6)
		Panel A: Value of earnings to present without injury			
9/7 - 12/31/2000	51	$ 12,570	$ 4,689	$ 17,259	$ 17,259
2001	52	39,911	14,887	54,798	54,798
2002	53	40,869	15,244	56,113	56,113
1/1 - 9/2/2003	53	27,382	10,214	37,596	37,596
Totals		$ 120,732	$ 45,033	$ 165,765	$ 165,765
		Panel B: Value of earnings to present following injury			
9/7 - 12/31/2000	51	$0	$0	$0	$0
2001	52	3,842	1,433	5,275	5,275
2002	53	375	140	514	514
1/1 - 9/2/2003	53	0	0	0	0
Totals		$ 4,217	$ 1,573	$ 5,790	$ 5,790

Present Value of Earnings Lost to Present $159,976

Panel A: Value of lost future earnings to age 60.2

Year (1)	Age (2)	Wages (3)	Fringe Benefits (4)	Total Earnings (5)=(3)+(4)	Present Value (6)
9/3 - 12/31/2003	54	$ 13,487	$ 5,031	$ 18,517	$ 18,383
2004	55	40,869	15,244	56,113	54,612
2005	56	40,869	15,244	56,113	53,510
2006	57	40,869	15,244	56,113	52,431
2007	58	40,869	15,244	56,113	51,373
2008	59	40,869	15,244	56,113	50,336
2009	60.2	38,417	14,329	52,746	46,192
Totals		$256,247	$95,580	$351,827	$326,846

Panel B: Value of Lost Future Earnings to Age 66

Year (1)	Age (2)	Wages (3)	Fringe Benefits (4)	Total Earnings (5)=(3)+(4)	Present Value (6)
9/3 - 12/31/2003	54	$ 13,487	$ 5,031	$ 18,517	$ 18,383
2004	55	40,869	15,244	56,113	54,612
2005	56	40,869	15,244	56,113	53,510
2006	57	40,869	15,244	56,113	52,431
2007	58	40,869	15,244	56,113	51,378
2008	59	40,869	15,244	56,113	50,336
2009	60	40,869	15,244	56,113	49,321
2010	61	40,869	15,244	56,113	48,325
2011	62	40,869	15,244	56,113	47,350
2012	63	40,869	15,244	56,113	46,396
2013	64	40,869	15,244	56,113	45,459
2014	65	30,243	11,281	41,523	36,364
Totals		$452,417	$168,751	$621,168	$ 553,868